

SEQUENCE LISTING

(1) GENERAL INFORMATION:

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YOUNG, Andrew A.  
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(ii) TITLE OF INVENTION: METHODS FOR REGULATING  
GASTROINTESTINAL MOTILITY

(iii) NUMBER OF SEQUENCES: 30

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(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk  
(B) COMPUTER: IBM PC compatible  
(C) OPERATING SYSTEM: PC-DOS/MS-DOS  
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 08/302,069  
(B) FILING DATE: 07-SEP-1994  
(C) CLASSIFICATION: Pending

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/118,381  
(B) FILING DATE: 07-SEP-1993

(viii) ATTORNEY/AGENT INFORMATION:

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(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 37 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val His Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 24 amino acids
- (B) TYPE: amino acids
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 24
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Leu Gly Arg Leu Ser Gln Glu Leu His Arg Leu Gln Thr Tyr Pro Arg  
1 5 10 15  
Thr Asn Thr Gly Ser Asn Thr Tyr  
20

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 37 amino acids
- (B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Ser Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 36 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 1,6
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 36
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu Val  
1 5 10 15  
His Ser Ser Asn Asn Phe Gly Ala Ile Leu Ser Ser Thr Asn Val Gly  
20 25 30  
Ser Asn Thr Tyr

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## (2) INFORMATION FOR SEQ ID NO:5:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 37 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Lys	Cys	Asn	Thr	Ala	Thr	Cys	Ala	Thr	Gln	Arg	Leu	Ala	Asn	Phe	Leu
1						5			10					15	
Val	His	Ser	Ser	Asn	Asn	Phe	Gly	Ala	Ile	Leu	Pro	Ser	Thr	Asn	Val
						20			25					30	
Gly	Ser	Asn	Thr	Tyr											
				35											

## (2) INFORMATION FOR SEQ ID NO:6:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 36 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (B) LOCATION: 1,6
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 36
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Cys	Asn	Thr	Ala	Thr	Cys	Ala	Thr	Gln	Arg	Leu	Ala	Asn	Phe	Leu	Val
1						5			10					15	

SD-111162.1

Arg Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Ser Thr Asn Val Gly  
20 25 30  
Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (B) LOCATION: 2,7
  - (D) OTHER INFORMATION: disulfide bridge between the Cys residues
  - (B) LOCATION: 37
  - (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val His Ser Ser Asn Asn Phe Gly Pro Val Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (B) LOCATION: 2,7
  - (D) OTHER INFORMATION: disulfide bridge between the Cys residues

(B) LOCATION: 37  
(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 36 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(B) LOCATION: 1,6  
(D) OTHER INFORMATION: disulfide bridge between  
the Cys residues  
(B) LOCATION: 36  
(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu Val  
1 5 10 15  
Arg Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Pro Thr Asn Val Gly  
20 25 30  
Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 36 amino acids  
(B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 1, 6
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 36
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu Val  
1 5 10 15  
His Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Pro Thr Asn Val Gly  
20 25 30  
Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 2, 7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val His Ser Ser Asn Asn Leu Gly Pro Val Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val His Ser Ser Asn Asn Leu Gly Pro Val Leu Pro Ser Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 36 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (B) LOCATION: 1,6
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 36
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu Val  
1 5 10 15  
His Ser Ser Asn Asn Leu Gly Pro Val Leu Pro Ser Thr Asn Val Gly  
20 25 30  
Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 37 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser Asn Asn Leu Gly Pro Val Leu Pro Ser Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 37 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser Asn Asn Leu Gly Pro Ile Leu Pro Pro Thr Asn Val  
20 25 30

Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 37 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:  
(B) LOCATION: 2,7  
(D) OTHER INFORMATION: disulfide bridge between  
the Cys residues  
(B) LOCATION: 37  
(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser Asn Asn Leu Gly Pro Ile Leu Pro Ser Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 37 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:  
(B) LOCATION: 2,7  
(D) OTHER INFORMATION: disulfide bridge between  
the Cys residues  
(B) LOCATION: 37  
(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15

SD-111162.1

Ile His Ser Ser Asn Asn Leu Gly Pro Ile Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:18:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (ix) FEATURE:
  - (B) LOCATION: 2,7
  - (D) OTHER INFORMATION: disulfide bridge between the Cys residues
  - (B) LOCATION: 37
  - (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Ile His Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:19:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 36 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (ix) FEATURE:
  - (B) LOCATION: 1,6
  - (D) OTHER INFORMATION: disulfide bridge between the Cys residues
  - (B) LOCATION: 36
  - (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu Ile  
1 5 10 15  
His Ser Ser Asn Asn Leu Gly Pro Ile Leu Pro Pro Thr Asn Val Gly  
20 25 30  
Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 37 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: protein

(ix) FEATURE:  
(B) LOCATION: 2,7  
(D) OTHER INFORMATION: disulfide bridge between  
the Cys residues  
(B) LOCATION: 37  
(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Ile Arg Ser Ser Asn Asn Leu Gly Ala Ile Leu Ser Ser Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 37 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: protein

(ix) FEATURE:

(B) LOCATION: 2,7

(D) OTHER INFORMATION: disulfide bridge between  
the Cys residues

(B) LOCATION: 37

(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Ile Arg Ser Ser Asn Asn Leu Gly Ala Val Leu Ser Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 37 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

(B) LOCATION: 2,7

(D) OTHER INFORMATION: disulfide bridge between  
the Cys residues

(B) LOCATION: 37

(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu  
1 5 10 15  
Ile Arg Ser Ser Asn Asn Leu Gly Pro Val Leu Pro Pro Thr Asn Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 37 amino acids

(B) TYPE: amino acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Thr Asn Phe Leu  
1 5 10 15  
Val His Ser Ser His Asn Leu Gly Ala Ala Leu Leu Pro Thr Asp Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:24:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Thr Asn Phe Leu  
1 5 10 15  
Val His Ser Ser His Asn Leu Gly Ala Ala Leu Ser Pro Thr Asp Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 36 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 1,6
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 36
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Cys	Asn	Thr	Ala	Thr	Cys	Ala	Thr	Gln	Arg	Leu	Thr	Asn	Phe	Leu	Val
1					5				10					15	
His	Ser	Ser	His	Asn	Leu	Gly	Ala	Ala	Leu	Pro	Ser	Thr	Asp	Val	Gly
					20				25					30	
Ser	Asn	Thr	Tyr												
			35												

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 37 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 2,7
- (D) OTHER INFORMATION: disulfide bridge between the Cys residues
- (B) LOCATION: 37
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

Lys	Cys	Asn	Thr	Ala	Thr	Cys	Ala	Thr	Gln	Arg	Leu	Thr	Asn	Phe	Leu
1						5				10				15	

SD-111162.1

Val Arg Ser Ser His Asn Leu Gly Ala Ala Leu Ser Pro Thr Asp Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (ix) FEATURE:
  - (B) LOCATION: 2,7
  - (D) OTHER INFORMATION: disulfide bridge between the Cys residues
  - (B) LOCATION: 37
  - (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Thr Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser His Asn Leu Gly Ala Ile Leu Pro Pro Thr Asp Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 37 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (ix) FEATURE:
  - (B) LOCATION: 2,7
  - (D) OTHER INFORMATION: disulfide bridge between the Cys residues

(B) LOCATION: 37

(D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Thr Asn Phe Leu  
1 5 10 15  
Val Arg Ser Ser His Asn Leu Gly Pro Ala Leu Pro Pro Thr Asp Val  
20 25 30  
Gly Ser Asn Thr Tyr  
35

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 25
- (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Val Leu Gly Lys Leu Ser Gln Glu Leu His Lys Leu Gln Thr Tyr Pro  
1 5 10 15  
Arg Thr Asn Thr Gly Ser Asn Thr Tyr  
20 25

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (B) LOCATION: 25
- (D) OTHER INFORMATION: amidated Pro (Prolinamide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Val Leu Gly Lys Leu Ser Gln Glu Leu His Lys Leu Gln Thr Tyr Pro  
1 5 10 15  
Arg Thr Asn Thr Gly Ser Gly Thr Pro  
20 25